



DEPARTMENT OF THE NAVY

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IN REPLY REFER TO:

8370
Ser 4081CZ/3072

APR 10 2003

From: Commander, Crane Division, Naval Surface Warfare Center
To: Naval Ordnance Safety and Security Activity, (N715)
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Via: (b)(6) (405A) *TN*

Subj: M14 ENHANCED BATTLE RIFLE (M14 EBR)

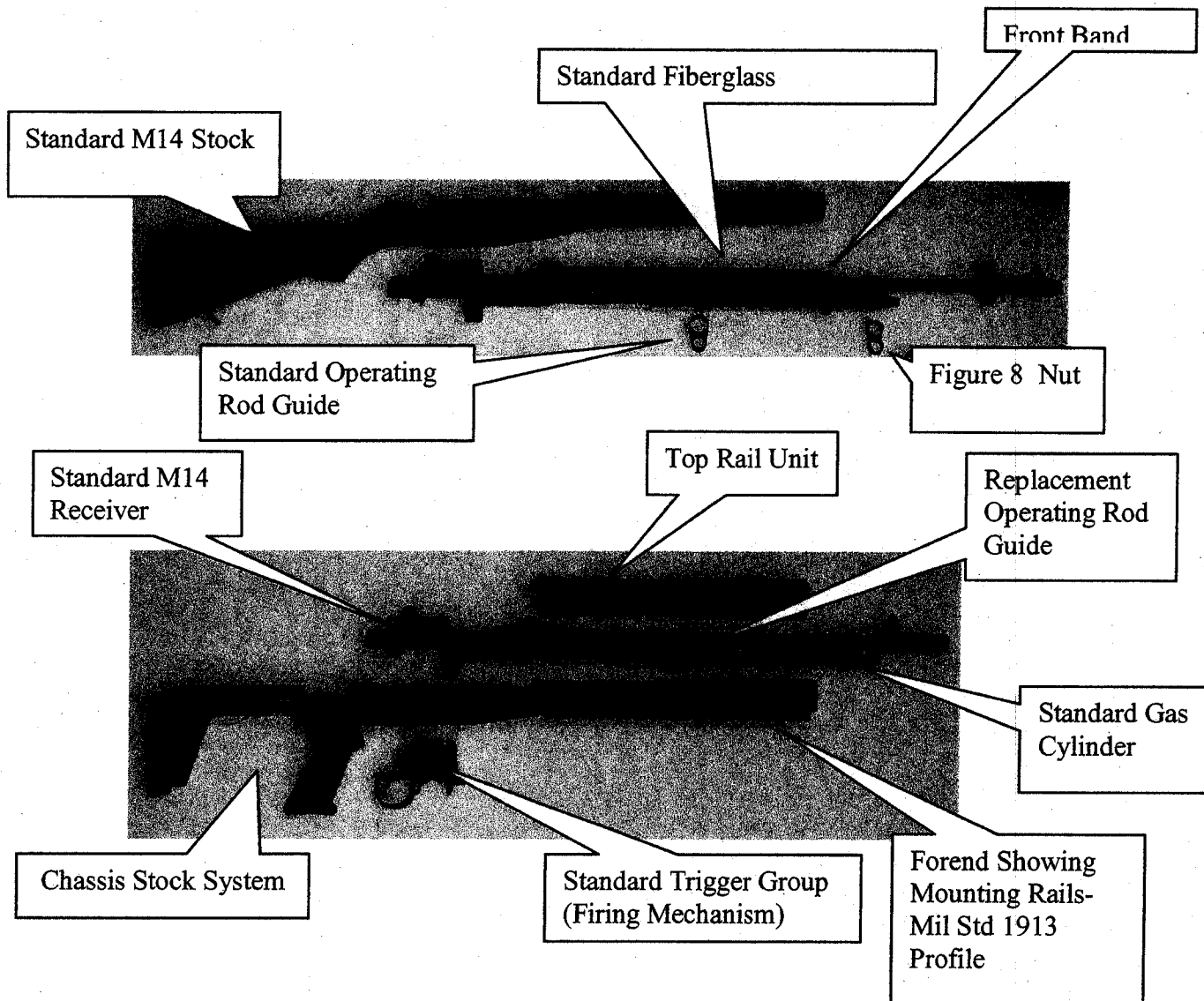
1. This letter is provided to inform the Weapon System Explosives Safety Review Board that a new variation of the M14 Rifle is being produced which will undergo operational assessments and is intended for follow-on fielding. The basic M14 operating system and safety characteristics remain unchanged in the M14 Enhanced Battle Rifle (EBR) variant.

2. Currently, the Naval Special Warfare Command (NAVSPECWARCOM) is sponsoring the M14 EBR Project. This project is intended to modernize the combat proven M14 battle rifle for NSW users. The focus is on ergonomic enhancements as well as increasing probability of hit for the M14 rifle, the platform upon which the EBR is based. The table below lists the common M14 parts and non-standard parts.

M14 Issue Rifle vs. M14 EBR (Enhanced Battle Rifle) Parts

Component Part	M14 EBR
Receiver	Standard M14
Trigger Group	Standard M14
Bolt Assembly	Standard M14
Bolt Release	New Design
Operating Rod	Standard M14
Operating Rod Guide	New Design
Gas Cylinder Assembly	Standard M14
Operating Spring & Guide	Standard M14
Front Band	None required
Iron Sights	Standard M14
Barrel	Standard, 16, or 18 inch
Flash Suppressor	Standard or Improved
Handguard	New Design
Magazine	Standard M14
Stock	New Design

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3. The main change between the M14 & EBR is the new design stock in the form of chassis stock system incorporating adjustable length and cheek-rest height, a long Mil-Std 1913 top rail and two 1913 side mounted rails. The system also has a full length lower 1913 rail, which may support future 40mm grenade launcher systems and has a short rail behind the receiver to support night vision mounting. Other improvements incorporated into the M14 EBR are a shorter 16 or 18 inch barrel (vs. 22 inch standard issue), extended bolt release for smooth operation with less shooter movement, improved flash suppressor,

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magnifying optic, tactical sling and a bipod. Though the M14 EBR barrel may be shorter than that of the standard issue M14 rifle, the operating system has not been altered. The operating rod guide is replaced with another of similar design, which guides the operating rod while also helping secure the barreled action to the stock. Its design facilitates direct stock interface allowing the gas cylinder and remaining barrel to free float for improved accuracy.

4. Three prototype Chassis Stock Systems were delivered to Crane Division, Naval Surface Warfare Systems, (NSWC Crane) on contract in December of 2002. They were assembled into M14 EBR prototypes and subjected to initial function and targeting technical evaluations at NSWC Crane. Standard 22 inch barrels along with 16 and 18 inch barrels were function fired with all showing good accuracy potential (under 2 inch group size at 100 yards) and reliability. The 16 inch version did require minor opening of the barrel's gas port by 10 thousandths of an inch in diameter for proper function. This barrel length is not currently of interest.

5. There are no safety issues with the replacement of the standard M14 stock and the other modifications and additions to the rifle included in the M14 EBR project. Function remains identical to the standard M14.

6. Naval Special Warfare Command has requested that NSWC Crane build 18 production representative M14 Enhanced Battle Rifles for operational assessment. Operational evaluations should be completed by early June with production to follow immediately upon operational approval.

7. Ammunition authorized will continue to include the full range of M80 (A130 / A149) Ball, M62 (A124 /A140) Tracer, M276 (A257) Dim Tracer, M118 Long Range (AA11) as well as M993 (AA03) Armor Piercing.

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8. This letter is provided for informational purposes only. NSWCR Crane maintains that no changes in function or safety result from this weapon upgrade. NSWCR Crane points of contact are (b)(6) Code 4081, telephone (b)(6) or DSN 482-5645 and Mr. Dave Armstrong, Code 4081, telephone (b)(6)

(b)(6)

By Direction

Copy to:
COMNAVSPECWARCOM (N43)